

Ocean Networks Canada

Ferry Maintenance Report – Queen of Alberni



Vessel: Queen of Alberni

Date: Nov 12, 2015

Arrival: 07:00 ferry to Tsawwassen, signed in at Tsawwassen terminal at 09:00.

Reporter: Ian Beliveau

Staff: Ian Beliveau, Rowan Fox

Reason for Visit

Supervise repair of external pod mounting hardware, swap instruments, service system. Note that QofA had been at Deas facility previously for maintenance work. Ship docked at berth 2 at Tsawwassen.

Summary, Dive Operations

The divers from All-Sea arrived at 09:20 and began setup. These included Lance Hiney (supervisor), Ryan (diver) and a 3rd person that assisted in dive ops. The All-Sea ops truck and trailer were positioned at the aft where the diver would leave the ship. The dive team completed necessary paperwork with ship's crew and lockout procedures by 10:10. They were given a briefing of the pod location and the tasks that were to be done. The dive commenced at 10:20. The pod was on the surface by 10:45. It was inspected, disassembled, cleaned and put back together (see observations). During this period welding occurred, during which a jig made at MTC was used to position the stud. The stud was 2.5" OA length and blue-gooped beforehand, fastened with ½"-13 nuts. The pod was sent back down at 11:05 and placed back on the ship's hull by 11:25.

Observations

1. Instruments – contamination was not too bad on arrival. Small tubes were discoloured with bio-fouling. Large tubes showed little sign of biofouling.
2. The pod was inspected, and a crack was found on the side. The crack appeared to stem from a hole that may have possibly been made by an old bolt threaded into the side of the pod.
3. All three oceanographic instruments are out of calibration window.
4. The new BBFL2 instrument housing has a wider B/H connector that will not fit the stainless mounting plate.
5. Sea strainer plug went missing during cleaning.
6. New Optode and TSG show up as red dots in acquisition software. No time to investigate on ship.
7. No inspection of the telemetry box on the monkey's island due to time and weather constraints.

Actions Taken

1. Pod stud repaired
2. Pod cleaned
3. Set leak sensor lower in drip tray

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4. Swapped old with new BBFL2 electronics in Wetlabs housings – crossed out Wetlab sticker serial numbers. Swapped yellow ONC inventory labels. **YELLOW LABELS ARE CORRECT.**
5. Plugged Sea strainer temporarily for testing purposes.
6. Sensors swapped:

INSTRUMENT	S/N IN	S/N OUT	NOTES
BBFL2	1285	787	Swapped Wetlabs housing. Swapped yellow ONC labels.
Optode	1797	418	Needs settings adjusted
TSG	0029	0019	Needs settings adjusted

7. Seakeeper system left ON, but **outlet valve closed.**

Future Actions (High Priority in Red)

Replace sea strainer plug – new plugs ordered from Trotac, expect by Monday Nov. 16th. Alternately this can be bypassed with 5/8" barb to NPT fittings. Bring fittings on next trip as alternative.

Need better leak sensor mount – adhesive ty-rap mount would be good.

Measurements needed for new BBFL2 SS mounting plate to accept larger connector OR see if we can order some new plates from Geoff Morrison. Emailed Geoff for a quote Nov. 13th for a quote.

TSG 0029 – needs to be set for 9600 bps. Is currently set for 4800 bps. Need to verify command set. To be done remotely on Monday Nov. 16th with Rowan.

Optode 1797 – needs output set for 100 for deployment. To be done remotely on Monday Nov. 16th with Rowan.

Set up SENSOR file in Seakeeper software for new serial numbers. To be done remotely on Monday Nov. 16th with Rowan.

Open the outlet valve.

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Pictures



All-Sea set up at aft of ship.



Left: weld supply line with floats running to starboard side near pod area.



Right: view from pod area back to the truck.

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Dive disembark and cable management area was on the other side of the support trailer (starboard).



Left: top and bottom of the pod.

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Left: crack in the upper part of the pod.



Close up of pod damage.

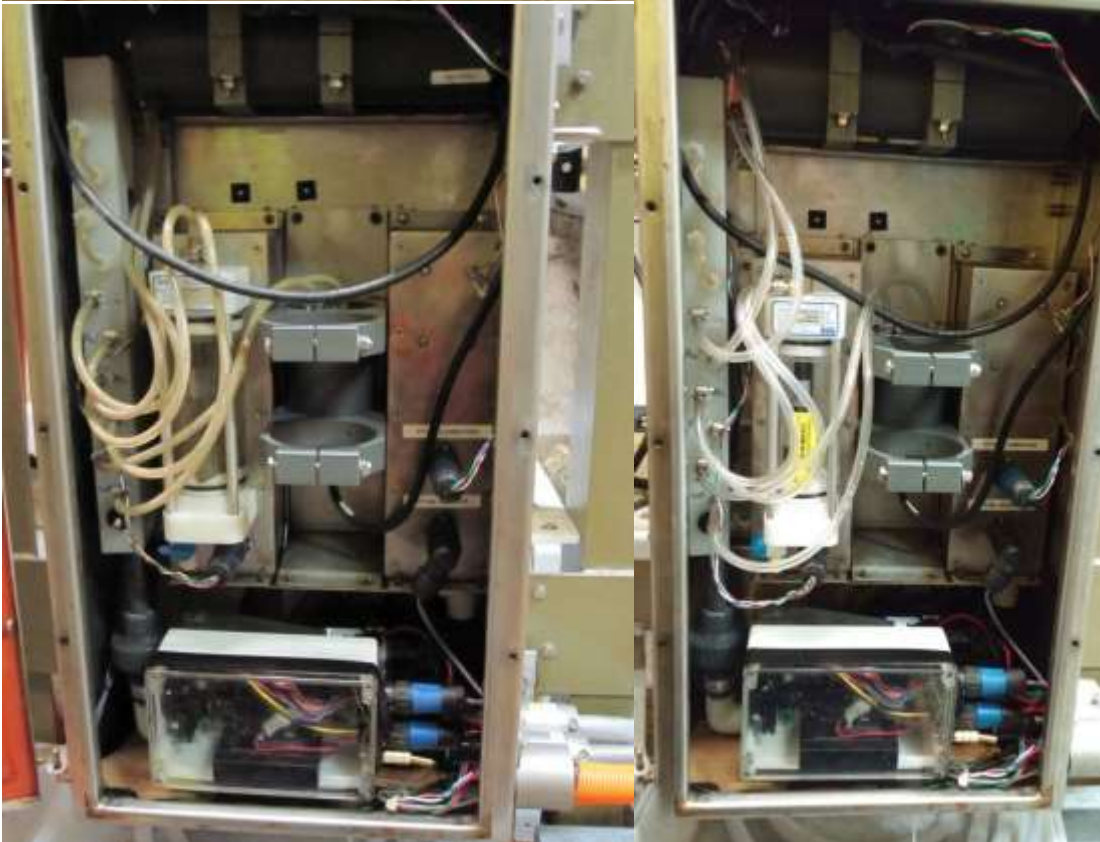
Found relatively little biofouling in the pod channel.

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The new BBFL2 instrument connector is too wide for the mounting plate slot. This can be rectified by elongating the slot (it appears there is space to do this).



Left: before
service

Right: after
service